DULOXETINE FOR THE TREATMENT OF POST-PROSTATECTOMY STRESS URINARY INCONTINENCE

Hypothesis / aims of study
Stress urinary incontinence (SUI) is a known complication following radical prostatectomy. Duloxetine, a combined serotonin and norepinephrine reuptake inhibitor, has been shown to decrease SUI by increasing urethral sphincter contractility. We examined the outcomes of patients with mild to moderate post-prostatectomy SUI treated with duloxetine.

Study design, materials and methods
A retrospective chart review of all men treated with duloxetine for the management of mild to moderate post-prostatectomy SUI from 2006 to 2009 was conducted. Mild to moderate SUI was defined as urethral leakage with physical activity requiring 5 or fewer absorptive pads per day. Patients with a history of pelvic radiation therapy were excluded from the study. Data extracted included patient age, daily pad usage, date of prostatectomy and medication side effects. In addition, pre and post treatment incontinence impact questionnaire (IIQ-7) and linear satisfaction [0 (unsatisfied) to 3 (greatly satisfied)] scores were recorded. All patients received duloxetine 30mg by mouth Qhs x one week, then 60mg Qhs thereafter. Patients were seen one month later to determine drug efficacy and side effects.

Results
Twenty-five men were included in the study. Mean patient age was 63.4 years (range 48 - 82). Average time from radical prostatectomy was 19.1 months (range 9 - 45). Daily pad usage decreased from 3.0 (range 1 - 5) to 1.6 (range 0 - 4) (p < 0.05). IIQ-7 scores decreased from 12.2 (range 6 - 18) to 7.7 (range 2 - 16) (p < 0.05). Linear satisfaction scores improved from 1.1 (range 0 - 2) to 2.4 (range 1 - 3) (p < 0.05). Following a one month trial of duloxetine 8/25 (32%) men reported satisfactory SUI improvement and requested to continue the medication. The drug was discontinued in 17/25 (68%) patients due to lack of efficacy in 9/25 (36%), intolerable side effects in 4/25 (16%) or both in 4/25 (16%). Reported side effects included fatigue, insomnia, nausea and dry mouth.

Interpretation of results
Duloxetine improved post prostatectomy SUI in 12/25 (48%) men following a 30 day trial. However, only 8/25 (32%) were able to tolerate the drug. We found no predictive factors with regards to drug efficacy or tolerability.

Concluding message
Duloxetine may satisfactorily improve mild to moderate post-prostatectomy SUI without significant side effects in approximately 1/3 of men.